2013 Secretary of Defense Environmental Awards
Environmental Excellence in Weapon System Acquisition Award

Each year since 1962, the Department of Defense has honored individuals, teams, and installations for their outstanding achievements and innovative environmental practices and partnerships that promote the quality of life and increase efficiencies without compromising mission success. A panel of judges with relevant expertise, education, or experience from federal and state agencies, academia, and the public evaluated each of the nominees to select winners of the nine categories that cover six subject areas: sustainability; environmental quality; environmental excellence in weapon system acquisition; natural resources conservation; environmental restoration; and cultural resources management. As structured since Fiscal Year 2009, some of the awards within these categories are on a two-year cycle with large/small and non-industrial/industrial installations competing in alternate years.

About the Environmental Excellence in Weapon System Acquisition, Small Program Individual/Team Category

In 2013, the Environmental Excellence in Weapon System Acquisition award highlighted individuals/teams for small programs. This award, the newest of the six subject areas, recognizes efforts to incorporate environment, safety, and occupational health requirements into a small weapon system acquisition program's system engineering, contracting, and decision-making processes. The 2013 winner of the Environmental Excellence in Weapon System Acquisition, Small Program Individual/Team award is the Tank Automotive Research, Development and Engineering Center's *Counterfeit Refrigerant Impact Team*.

About the Counterfeit Refrigerant Impact Team

The U.S. Army TACOM Life Cycle Management Command and Tank Automotive Research, Development and Engineering Center's Counterfeit Refrigerant Impact Team not only improved safety for Soldiers and vehicle maintenance personnel, but also reduced harm to the environment, improved force readiness, and lowered vehicle maintenance costs across the Army. The refrigeration industry has tracked counterfeit refrigerants for several years and in 2011, the industry identified the widespread introduction of counterfeit refrigerants containing mixtures of discontinued chemical compounds that are flammable, explosive, toxic to humans, and harmful to the environment. In response, a core integrated product team was formed to study these environmental risks and develop solutions for identifying, containing, and mitigating contaminated refrigerants in U.S. military vehicles and equipment. These new initiatives that identify counterfeit refrigerants in military vehicles and equipment allow the team to properly capture, contain, and safely dispose these chemicals. Specific team accomplishments include:

Reactions from counterfeit refrigerants with air conditioning materials can cause equipment, such as laboratory vessels, to corrode.

- Developed procedures to check air conditioning systems and refrigerant canisters for content purity. These procedures help the team determine the severity of contamination, potential impacts, health risks, and potential costs to mitigate contamination.

- Identified more than 18 counterfeit refrigerants found in military vehicles and methods for capturing these refrigerants from inside the vehicles. Many of these refrigerants destroy the seals used in air conditioning systems over time. If these chemicals are left in the vehicles, they will leak out into the atmosphere and contribute to ozone layer depletion or they may leak during vehicle operation, exposing Soldiers to toxic and flammable gases.
- Modified and updated refrigerant electronic testers to accommodate counterfeit refrigerant issues and identify contaminated vehicle systems and equipment. The team identified military vehicles returning from overseas operations as the most at-risk vehicles, so they worked with stakeholders to train depot personnel on proper electronic tester use.

Refrigerant electronic testers are used on tactical vehicles to analyze refrigerant purity and identify equipment that has been contaminated with counterfeit refrigerants.

The team's accomplishments led to a highly effective, quick-response, collaborative effort that protects the safety and occupational health of service members, reduces waste and harmful discharges and emissions, and enables significant cost savings and performance improvements.

Past Secretary of Defense Environmental Awards
Environmental Excellence in Weapon System Acquisition Category Winners

2012 - Stryker Brigade Combat Team, Warren, Michigan
2011 - Sustainable Painting Operations for the Total Army, Aberdeen Proving Ground, Maryland
2010 - Aeronautical Systems Center Environmental and Occupational Health Team, Wright-Patterson Air Force Base, Ohio
2008 - Fairchild Air Base, Washington
2006 - C-17 Pollution Prevention Integrated Product Team, Wright-Patterson Air Force Base, Ohio